This violet is of interest to botanists of California because of its affinity to Viola pedunculata T. & G. Although V. pedunculata is a very much larger plant than V. galeanaensis, and its large yellow flowers present a very different appearance, yet in vital characters, as shown in the table below, these two species are much alike. The closest relative of V. galeanaensis is unquestionably the Mexican species V. flagelliformis Hemsley, from which it is doubtless derived. However, the characters of V. galeanaensis suggest that it may be the original progenitor of the far distant Pacific Coast species, V. pedunculata T. & G. The principal characters of these three species are summarized in the above table.

> Santa Rosa Junior College, Santa Rosa, California.

A NEW SPECIES OF OXYTROPIS FROM THE CENTRAL ROCKY MOUNTAINS

C. L. PORTER

Oxytropis obnapiformis sp. nov. Subscaposis, sericeis, argenteis, erectis, perennis, 1-3 dm. altitudine; foliis pinnatis, 11-25foliolatis, foliolis oblongo-lanceolatis, 5-30 mm. longitudine, 2-4 mm. latitudine; stipulis adnatis petiolis; scapis foliis subaequalibus vel longioribus, ca. 10-20 floris; corollis purpurascentibus, 15-20 mm. longis, leguminibus ovatis, inflatis, ad rostrum vehementer contractis, villosis albis, subcoriaceis, basi ad rostrum 8-12 mm. longa, 5-8 mm. lata, rostrum 5-8 mm. longum, sectione transversa cordata, sutura superiore introflexa fere ad medium; semina complura, reniforma, 1-2 mm. longa.

Grayish strigose or villous subscapose erect perennials, 1-3 dm. high, from a silky multicipital caudex surmounting a slender taproot; leaves pinnate, mostly 11-25-foliolate, the leaflets oblonglanceolate, 5-30 mm. long, 2-4 mm. wide, grayish with somewhat appressed silky pubescence; stipules adnate to the petiole, scarious and villous-pubescent; scapes equaling or exceeding the leaves, about 10-20-flowered, the inflorescence a spicate raceme; bracts about 5 mm. long, lanceolate; calyx cylindrical at time of blooming, about 10 mm. long, grayish-strigose or villous, the teeth lanceolate to oblong, 2-3 mm. long; corolla purplish, the banner pale to white in the center with purple margin, 15-20 mm. long; mature fruit splitting the calvx and exserted, ovoid and inflated, with an abrupt slender beak, softly white-villous, somewhat transversely wrinkled when dry, the texture thin-coriaceous, the body 8-12 mm. long, 5-8 mm. broad, the beak 5-8 mm. long, the cross section cordate in outline with the ventral suture intruded about to the middle; seeds several in each pod, reniform, 1–2 mm. long.

Type. Sand hills 8-9 miles west of Maybell, on U.S. 40, elevation 5,900 ft., Moffat County, Colorado, Porter 3864, June

MADROÑO

19, 1946 (Rocky Mountain Herbarium, University of Wyoming, Laramie. Isotypes, Gray Herbarium, Harvard University; United States National Museum; New York Botanical Garden; Missouri Botanical Garden; Colorado Agricultural & Mechanical College; University of California; and herbarium of R. C. Barneby, Wappingers Falls, New York).

Cotypes. From type locality, July 6, 1945, Porter 3616 (Rocky Mountain Herbarium, Gray Herbarium, New York Botanical

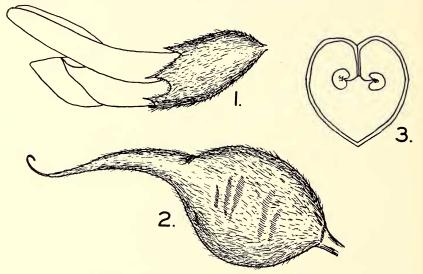


FIG. 1. Oxytropis obnapiformis Porter: 1, flower with wing removed; 2, fruit; 3, cross section of fruit. All approximately $\times 3.75$.

Garden, Philadelphia Academy of Sciences, University of Washington, University of Texas, and Southern Methodist University); from type locality, June 19, 1946, Harrington 1906 (Colorado Agricultural & Mechanical College); from dry rocky hillsides near Five Springs Falls, elevation 7,500 ft., Big Horn County, Wyoming, July 11, 1936, Williams & Williams 3314 (Rocky Mountain Herbarium); from the mouth of Shell Canyon, elevation 4350 ft., Big Horn County, Wyoming, Ripley & Barneby 8010 (Rocky Mountain Herbarium, and the herbarium of R. C. Barneby).

This interesting species, common to the western slope of the Big Horn Mountains of Wyoming and the dry sandy hills of northwestern Colorado, is named in allusion to the somewhat inverted turnip-shaped pods, these being its most unique distinguishing feature. It is undoubtedly a member of the section *Campestres*, and in foliage and flower characteristics closely resembles members of the *O. Lambertii* complex. It blooms early in June or even in May in the type locality, since it was well past most of its

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blooming period when collected June 19, only a few flowers remaining on occasional plants. The specimen collected by Williams has both flowers and mature fruit; that collected by Barneby has only fruits. The plants from Wyoming appear to have a tendency toward a more exserted inflorescence than those from Colorado, but this may be due to a habitat difference since there is little else to distinguish them.

The writer is indebted to Mr. R. C. Barneby for making his collection available for study, thus adding to our knowledge of the known range of the species.

Department of Botany and Rocky Mountain Herbarium, University of Wyoming, Laramie, (Contribution No. 203).

REVIEW

Los Juniperus Mexicanos. By MAXIMINO MARTÍNEZ. Tom 17, Anales del Instituto de Biologia de la Universidad Nacional de Mexico, Mexico, D. F., 1946. 128 pp., 108 figs., paper cover.

A few months ago, in reviewing Professor Martínez's book on the genus *Pinus* in Mexico, I expressed the hope that he would continue to produce papers of comparable excellence. In issuing the above paper on the genus *Juniperus* in Mexico he has fulfilled that hope.

The first twenty-four pages of the paper are utilized in discussing the general characteristics of the genus and its representatives in Mexico; a few paragraphs on the qualities of the lumber produced by Mexican junipers; the vegetational zones in different parts of the country; the subgeneric classification; and several lists of species and lower entities based on such characters as size of fruit, number of seeds and nature of the bark. This is followed by a key to the species and full descriptions of the entities recognized, together with citations of references and specimens examined.

Prior to 1944 only four species of Juniperus had been recognized as occurring in Mexico. In this paper Professor Martínez accepts twelve species, six varieties, and three formas. All of these fit into Spach's section Sabina, and Martínez has distributed them among five subsections, the Flaccidae, Deppeanae, Jaliscanae, Monticolae and Monospermae. Of this number, four species (J. jaliscana, Blancoi, durangensis, and Patoniana); six varieties (J. jaliscana var. typica and var. poblana, J. Deppeana var. robusta and var. zacatecensis, J. monosperma var. gracilis, and J. erythrocarpa var. coahuilensis); and three formas (J. Patoniana forma obscura, J. monticola forma compactum and J. monticola forma orizabensis) are described as new. One new combination and one new name also are proposed. Two other species, J. Gamboana and J. comitans had been described by Professor Martínez in 1944.